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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/723,062

11/26/2003

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GXA 002A

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06/15/2007

EXAMINER

MCCLENDON, SANZA L

ART UNIT

PAPER NUMBER

1711

MAIL DATE

DELIVERY MODE

06/15/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/723,062	Applicant(s) XIAO, HAN XIONG	
	Examiner Sanza L. McClendon	Art Unit 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9 and 11-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9 and 11-19 is/are rejected.
- 7) ☒ Claim(s) 20-22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Amendment

1. In response to the Amendment received on March 27, 2007, the examiner has carefully considered the amendments. The examiner acknowledges the cancellation of claims 1-8 and 10.

Response to Arguments

2. Applicant's arguments filed March 27, 2007 have been fully considered but they are not persuasive. However, the rejection of claims 9-10 and 12-19 under 35 USC 102(b) as being anticipated by Treasure et al (5,504,145) has been withdrawn for fails to teach applicant's invention. However, the rejection of claims 9-13 under 35 USC 102(b) as being anticipated by Seiner et al (3,318,828) remains. By applicant's own admission, per remarks, Seiner et al does teach tung oil, thus not only is it disclosed thus making, at least tung oil, anticipated, one of ordinary skill in the art could have obtained applicant's invention by choosing the disclosed tung oil, even though the examples use linseed oil and dehydrated castor oil. Therefore the inventions of claims 9, and 11-13 are anticipated, still, by the reference.

Newly applied references for claims 9 and 11-19 can be found below.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 9, 11, 14-16, and 18-19 rejected under 35 U.S.C. 102(b) as being anticipated by Themistoklis (3,758,4278).

Themistoklis teaches epoxy-modified polyurethane resin that can be diluted with water or dispersed in water. Said polyurethane is obtained by reacting (I) (a) 25 to 70% of an unsaturated fatty acid, wherein up to 25% by weight can be a drying oil, (b) up to 30% by weight of a aliphatic, cycloaliphatic or aromatic carboxylic acid or hydroxy-carboxylic acid or their anhydrides, (c) 3 to 35—wt% of a mono- or polyhydric organic hydroxy compound, (d) up to 17—wt% of a polyoxyalkylene compound, (e) 1 to 50% by weight of an epoxide compound having at least one epoxy group, and (d) up to 60—wt% of a copolymerizable monomer. Then the composition of (I) is reacted with a composition of (II)

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comprising (g) up to 65—wt% if an unsaturated mono- or polyalcohol or their mixtures and (h) 0.05 to 50—wt% of an isocyanate. The resulting reaction product of (I) and (II) are then, optionally, converted to a state that is dilutable or dispersible in water by the reaction with an alkali and/or strong base. The fatty acids include eleosteric acid and parinaric acid—see column 6, lines 61-62. This appears to anticipate instant claims. Thus claims 9, 11, 14-16, and 18-19 are anticipated.

5. Claims 9 and 11-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Milligan et al (3,412,054).

Milligan et al teaches water-dilutable polyurethanes. Said polymers are water dilutable by a reaction of an organic polyisocyanate with a 2,2-di (hydroxymethyl) carboxylic acid. Said acids are prepared from aldehydes that contain at least 2 hydrogen atoms in the alpha position. The acids are incorporated into the polyurethanes by reaction them with a polyisocyanates. It is disclosed that said polyurethanes can comprise air-drying systems, such as by reacting said polyisocyanate and said 2,2-di (hydroxymethyl) carboxylic acid with one or more olefinic compounds, such as drying oils. Said olefinic drying oils include tung oil, oelosteric acid and punicic acid as examples—see column 3. The formed polyurethane can be made water-dilutable by a water-solubilization method with includes reacting said polyurethane with a basic groups, such as amines and/or ammonium salts. Said polyurethane dispersions are useful as coatings, thus adherent, and printing inks.

This appears to anticipate claims 9 and 11-19.

Allowable Subject Matter

6. Claims 20-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: see previous office action.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L. McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Sanza L. McClendon

Examiner

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